

REMARKS

In response to the above-identified Office Action, Applicant seeks reconsideration of the application. In this response, Claims 2, 3, 11 and 12 have been canceled, Claims 1, 4, 5, 8-10 and 19 have been amended and no claims have been added. Accordingly, Claims 1, 4-10, 13-25 are pending.

I. Claim Rejections Under 35 U.S.C. § 102(e)

In the Office Action, the Examiner rejects Claims 1, 2, 4, 5, 6, 10, 11 and 14 under 35 U.S.C. § 102(e) as being anticipated by Jouppi et al. (U.S. Patent No. 6,112,318). Applicant respectfully traverses this rejection.

It is axiomatic that to anticipate a claim, every element of the claim must be disclosed within a single reference. Thus, if even one feature of independent Claims 1, 10 and 19 is not found in Jouppi, Applicant respectfully requests that the rejection of corresponding claim(s) under 35 U.S.C. § 102 as being anticipated by Jouppi be withdrawn.

In accordance with one embodiment, the system is described for monitoring performance counters that exist in software codes (e.g., performance counters implemented using software variables) as well as performance counters that are implemented using hardware registers. By enabling a user to select and monitor performance counters in the form of hardware registers and software variables, this allows the user to observe relationships and interactions between the software code and various hardware components within a given computer system. Such information may be used by software developers to optimize their software application to run more effectively on the computer system.

Applicant notes that independent Claims 1, 10 and 19 have been amended to further require that at least one of the performance counters associated with selectable events is implemented using a hardware register and at least another one of the performance counters associated with selectable events is implemented using a software variable.

Jouppi discloses a performance monitoring system that employs performance counters that are embodied in the form of hardware registers. However, Jouppi fails to disclose or suggest implementing at least one of the performance counters associated with selectable events using a software variable, as recited by Applicant.

It is therefore respectfully submitted that Claims 1, 10 and 19 are not anticipated by Jouppi and the rejection of Claims 1, 10 and 19 as being anticipated by Jouppi should be withdrawn. Dependent Claims 4-9, 13-18 and 20-25 are submitted as not being anticipated by Jouppi at least for the reasons given in support of their base Claims 1, 10 and 19.

II. Claim Rejections Under 35 U.S.C. § 102(a)

Claims 10, 13 and 16 are rejected under 35 U.S.C. § 102(a) as being anticipated by Aubley ("Windows 2000 Performance Tools", Windows & .NET Magazine Network, April 1, 2000). Applicant respectfully traverses this rejection.

As noted above, Claim 10 has been amended to further require that at least one of the performance counters is implemented using a hardware register and at least another one of the performance counters is implemented using a software variable.

Aubley describes performance monitoring tools available in Microsoft Windows 2000 operating system. However, Aubley fails to disclose or suggest [1] configuring a collection session by allowing a user to selectively choose a subset of events to be monitored during a collection session from a performance object containing a list of events, [2] programming performance counters associated with the subset of events selected by the user to count the occurrence of a respective event, and [3] reading data stored in the performance counters during the collection session, wherein at least one of the performance counters is implemented using a software variable and at least another one of the performance counters is implemented using a hardware register, as recited in Claim 10.

In view of the foregoing, Applicant respectfully submits that Claim 10 is not anticipated by Aubley and requests withdrawal of the rejections of Claim 10. Dependent Claims 13 and 16 are submitted as not being anticipated by Aubley at least for the reasons given in support of their base Claim 10.

III. Claims Rejections Under 35 U.S.C. § 102(b)

Claims 1, 3, 8, 9, 10, 12, 17 and 18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Bolosky et al. (U.S. Patent No. 5,485,574). Applicant respectfully traverses this rejection.

As noted above, Claims 1 and 10 have been amended to further require that at least one of the performance counters is implemented using a hardware register and at least another one of the performance counters is implemented using a software variable.

Applicant respectfully submits that Bolosky fails to disclose or suggest [1] allowing a user to select a set of events to be monitored during a collection session from a performance object, [2] programming performance counters associated with the set of events selected by the user to count the occurrence of a respective event, and [3] reading data stored in the performance counters during the collection session, wherein at least one of the performance counters is implemented using a software variable and at least another one of the performance counters is implemented using a hardware register, as recited in amended Claims 1 and 10.

In view of the foregoing, Applicant submits that Claims 1 and 10 are not anticipated by Bolosky and requests withdrawal of the rejection of Claims 1 and 10. Dependent Claims 8-9, 12, 17 and 18 are submitted as not being anticipated by Bolosky at least for the reasons given in support of their base Claims 1 and 10.

IV. Claim Rejections Under 35 U.S.C. § 103

Claims 7, 15 and 19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aubley, in view of Jouppi and Safford (“A Framework for Using the Pentium’s Performance Monitoring Hardware”, University of Illinois, 1995). Applicant respectfully traverses this rejection.

To establish a *prima facie* case of obviousness, the cited references when combined must teach or suggest all the claim limitations. Additionally, Applicant notes that the teaching or suggestion to make the claimed combination must be found in the prior art, not in applicant’s disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

As to Claims 7 and 25, the Examiner has taken “Official Notice” that the generation and assignment of identifiers to processes and events are well known in the art. Applicant notes that assertions of technical facts in areas of esoteric technology must always be supported by citation to some reference work recognized as standard in the pertinent art and the Applicant given, in the Patent Office, the opportunity to challenge the correctness of the assertion or the notoriety or repute of the cited reference. In re Pardo, 214 U.S.P.Q. 673 (C.C.P.A. 1982). Applicant, therefore, submits that the Examiner has violated In re Pardo and a *prima facie* case of obviousness has not been established.

As to Claim 15, Applicant incorporates its prior argument with respect to its base Claim 10. Additionally, because Aubley does not, as suggested by the Examiner, anticipate Claim 10, it follows that Claim 15 is not rendered obvious by a combination of Aubley in view of Jouppi and Safford. Moreover, because Aubley does not anticipate Claim 10 from which Claim 15 depends, it would not have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Aubley in accordance with the teachings of Jouppi and Safford.

As to Claims 19-25, Applicant respectfully submits that Aubley, Jouppi and Safford fail to teach or suggest a performance monitoring system in which at least one of performance counters includes a hardware register and a controller to selectively couple one of the event signals to the hardware register to increment the hardware register, and at least another one of the performance counters is implemented using a software variable, as recited in amended Claim 19.

In view of the foregoing, Applicant respectfully submits that Claims 7, 15 and 19-25 are not obvious over Aubley in view of Jouppi, and Safford, and requests withdrawal of the rejections.

CONCLUSION

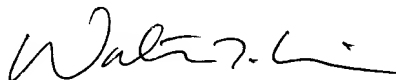
In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance, and such action is earnestly solicited at the earliest possible date.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly, extension of time fees.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP

Dated: April 3, 2003

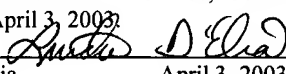


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Linda D'Elia

April 3, 2003